Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/781,862

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A polymerizable composition comprising:

(A) a monocarboxylic acid compound which causes at least one of decarboxylation and dehydration by heat;

(B) a radical initiator;

(C) a compound having at least one ethylenically unsaturated bond; and

(D) an infrared ray absorber,

wherein the compound (A) and the radical initiator (B) are separate and distinct compounds from each other, and

wherein the compound (A) is one having a group represented by the following formula

(I):

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wherein:

X represents a divalent connection group selected from -S-, -SO₂-, -N(R³)-, and <u>-CO-,</u>

R³ represents a monovalent substituent, and

R¹ and R² each independently represents a <u>hydrogen</u> atom or a monovalent substituent, provided that R¹ and R², or either one of R¹ and R² and R³ may be taken together to form a ring structure.

- 2. (original): The polymerizable composition according to claim 1, wherein the compound (A) is one which causes at least one of decarboxylation and dehydration at a temperature of 100°C to 300°C.
- 3. (original): The polymerizable composition according to claim 1, wherein the compound (A) is one having a structure capable of forming a 4 to 6-membered lactone ring, a 4 to 6-membered lactam ring or a 4 to 6-membered cyclic acid anhydride.

Claim 4. (canceled).

5. (currently amended): The polymerizable composition according to claim 1, wherein the compound (A) is a monocarboxylic acid compound represented by the following formula (I-2):

$$R^{1}$$
 $A-X^{1}-C-CO_{2}H$
 R^{2}
(1-2)

wherein

A represents an aromatic group or a heterocyclic group,

 R^1 and R^2 each independently represents a hydrogen atom or a monovalent substituent, provided that R^1 and R^2 , either one of R^1 and R^2 and R^2 and R^2 and R^3 and R^4 and

 X^1 represents a divalent connection group selected from—O-, -S-, -SO₂-, -NH-, -N(R³)-, -CH₂-, -CH(R⁴)-, and -C(R⁴)(R⁵)-, -and

R³ represents a monovalent substituent, and

 R^4 , and R^5 each independently represents a hydrogen atom or a monovalent substituent.

6. (original): The polymerizable composition according to claim 1, wherein the compound (A) is a compound represented by the following formula:

wherein

A represents an aromatic group or a heterocyclic group,

 R^1 , R^2 , R^6 , R^7 and R^8 each independently represents a hydrogen atom or a monovalent substituent, provided that R^1 and R^2 , either one of R^1 and R^2 and A, or R^8 and Z may be taken together to form a ring structure,

and

Z represents a monovalent substituent.

7. (currently amended): A polymerizable composition comprising:

(A-1) a monocarboxylic acid compound represented by the following formula (I-2);

- (B) a radical initiator;
- (C) a compound having at least one ethylenically unsaturated bond; and
- (D) an infrared ray absorber:

$$R^{1}$$
 $A-X^{1}-C-CO_{2}H$
 R^{2}
(I-2)

wherein

A represents an aromatic group or a heterocyclic group,

 R^1 and R^2 each independently represents a hydrogen atom or a monovalent substituent, provided that R^1 and R^2 , either one of R^1 and R^2 and R^2 and R^3 and R^4 and

 X^1 represents a divalent connection group selected from—O-, -S-, -SO₂-, -NH-, -N(R³)-, -CH₂-, -CH(R⁴)-, and -C(R⁴)(R⁵)-, -and

R³ represents a monovalent substituent, and

R⁴, and R⁵ each independently represents a hydrogen atom or a monovalent substituent.

8. (currently amended): The polymerizable composition according to claim 7, wherein X^1 in the formula (I-2) is a divalent connection group selected from—NH-, -N(R³)-, -CH₂-, -CH(R⁴)-, and -C(R⁴)(R⁵)-.

9. (canceled).

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10. (original): The polymerizable composition according to claim 7, wherein X^1 in the formula (I-2) is $-N(R^3)$ -.

- 11. (original): The polymerizable composition according to claim 7, wherein the substituent represented by R^3 contains at least one of $-CO_2$ and $-CON(R^8)$ in its structure in which R^8 represents a hydrogen atom or a monovalent substituent.
- 12. (original): The polymerizable composition according to claim 7, wherein the substituent represented by R³ is represented by one of the following formulae (i) and (ii):

wherein, R^6 , R^7 and R^8 each independently represents a hydrogen atom or a monovalent substituent, Z represents a monovalent substituent, and R^8 and Z may be taken together to form a ring structure.

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13. (original): The polymerizable composition according to claim 7, wherein the monovalent substituent represented by R¹ and R² is a halogen atom, an optionally substituted amino group, an alkoxycarbonyl group, a hydroxyl group, an ether group, a thiol group, a thioether group, a silyl group, a nitro group, a cyano group, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heterocyclic group.

14. (canceled).

15. (currently amended): A lithographic printing plate precursor comprising a support and a recording layer containing a polymerizable composition which comprises: (A-1) a monocarboxylic acid compound represented by the following formula (I-2); (B) a radical initiator; (C) a compound having at least one ethylenically unsaturated bond; and (D) an infrared ray absorber:

$$R^{1}$$
 $A-X^{1}-C-CO_{2}H$
 R^{2} (1 – 2)

wherein

A represents an aromatic group or a heterocyclic group,

 R^1 and R^2 each independently represents a hydrogen atom or a monovalent substituent, provided that R^1 and R^2 , either one of R^1 and R^2 and R^2 and R^3 , either one of R^4 and R^4 an

 X^1 represents a divalent connection group selected from—O , -S-, -SO₂-, -NH-, -N(R³)-, -CH₂-, -CH(R⁴)-, and -C(R⁴)(R⁵)-, -and

R³ represents a monovalent substituent, and

 R^4 , and R^5 each independently represents a hydrogen atom or a monovalent substituent.

16-17 (canceled).